NanoGUNE is a Research Center devoted to conducting world-class nanoscience research for a competitive growth of the Basque Country. NanoGUNE is a member of the Basque Research and Technology Alliance (BRTA) and is recognized by the Spanish Research Agency as a María de Maeztu Unit of Excellence.

**Main functions, requisites & benefits**

**Main functions**

The position is offered in the Nanomaterials Group, led by Mato Knez (m.knez@nanogune.eu), under the supervision of Aranzazu Sierra Fernandez (a.sierra@nanogune.eu). The activity of the Nanomaterials group is focused on the synthesis and functionalization of materials. Its research programme has been divided into thin-film coating, hybrid inorganic-organic materials, and bio-organic nanomaterials. The candidate will join a newly established research line focusing on preservation of cultural heritage. The aim of the project is to develop new strategies for the preservation of cultural goods and the prospective PhD student will design, synthesize, and optimize inorganic-organic hybrid formulations for this purpose. We seek a candidate who is both motivated and innovative, boasting a solid background in materials science/engineering, chemical, physical, or related background and skills in materials fabrication and characterization. The project's primary focus will be on developing protective coatings for cultural heritage sites, emphasizing strength, toughness, durability, and compatibility with building materials. Prior experience with the prospective candidate in vapor phase processing, thin film coating, and physicochemical characterization are considered beneficial. Responsibilities: To process design and materials development. To process optimization and materials characterization. To contribute to testing of the efficiency of the materials. To report results in project meetings and develop strategies for further optimization of materials and processes.

**Requisites**

**Educational Qualifications:** Suitable Scientific Education, a Master’s Degree (or equivalent University Degree) in materials Science/Engineering, Chemistry, Physics, or similar. **Technical Experience:** Hands-on experience in one or more of the following techniques is beneficial for the position: ALD, CVD, FTIR, SEM-EDX, powder processing, XRD, XRR. **Personal Attributes:** We look for a talented, motivated, and enthusiastic researcher. Analytical skills, initiatives, and creativity are highly desirable. **Passion for Research:** Naturally curious who is eager to learn more and has a strong interest in research. **Communication Skills:** Excellent English communication skills for work in a dynamic and international environment. **Research Interests:** Passionate about research in cultural heritage, specifically in its conservation and restoration. Additionally, the candidate should be a team player in an International Research Group.

**Benefits**

A teamwork in a diverse and inclusive environment and welcome all kinds of applicants regardless of age, disability, gender, nationality, race, religion, or sexual orientation.